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ABSTRACT

This study uses data from a national survey of principals of public schools with a 7th grade to document and analyze the variation in the types of marks and evaluations included on report cards issued to young adolescents in the United States. The analyses examine the prevalence of report card entries of various types and the antecedents and consequences of using specific types of entries. Principals report that performance grades are widespread, handwritten comments and conduct grades are common, and progress and effort grades are rare. Although grade span, region, size of grade enrollment, and urbanicity have some important connections to report card practices, there is considerable variation in practices among schools with similar grade spans, locations, or grade enrollments. Use of progress grades or handwritten comments on report cards is significantly associated with middle grades principals' reports of lower retention rates, lower projected dropout rates for males, and more successful middle grades programs. It is suggested that the actual benefits to students when they receive comments on each report card from each teacher are probably greater than the average benefits reported here. (Author/RH)

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A National Description of Report Card Entries in the Middle Grades

Douglas J. Mac Iver

Report No. 9

July 1990

CENTER FOR RESEARCH ON EFFECTIVE SCHOOLING
FOR DISADVANTAGED STUDENTS

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**Center for Research on Effective Schooling for Disadvantaged Students
The Johns Hopkins University
3505 North Charles Street
Baltimore, Maryland 21218**

The Center

The mission of the Center for Research on Effective Schooling for Disadvantaged Students (CDS) is to significantly improve the education of disadvantaged students at each level of schooling through new knowledge and practices produced by thorough scientific study and evaluation. The Center conducts its research in four program areas: The Early and Elementary Education Program, The Middle Grades and High Schools Program, the Language Minority Program, and the School, Family, and Community Connections Program.

The Early and Elementary Education Program

This program is working to develop, evaluate, and disseminate instructional programs capable of bringing disadvantaged students to high levels of achievement, particularly in the fundamental areas of reading, writing, and mathematics. The goal is to expand the range of effective alternatives which schools may use under Chapter 1 and other compensatory education funding and to study issues of direct relevance to federal, state, and local policy on education of disadvantaged students.

The Middle Grades and High Schools Program

This program is conducting research syntheses, survey analyses, and field studies in middle and high schools. The three types of projects move from basic research to useful practice. Syntheses compile and analyze existing knowledge about effective education of disadvantaged students. Survey analyses identify and describe current programs, practices, and trends in middle and high schools, and allow studies of their effects. Field studies are conducted in collaboration with school staffs to develop and evaluate effective programs and practices.

The Language Minority Program

This program represents a collaborative effort. The University of California at Santa Barbara is focusing on the education of Mexican-American students in California and Texas; studies of dropout among children of immigrants are being conducted at Johns Hopkins, and evaluations of learning strategies in schools serving Navajo, Cherokee, and Lumbee Indians are being conducted by the University of Northern Arizona. The goal of the program is to identify, develop, and evaluate effective programs for disadvantaged Hispanic, American Indian, Southeast Asian, and other language minority children.

The School, Family, and Community Connections Program

This program is focusing on the key connections between schools and families and between schools and communities to build better educational programs for disadvantaged children and youth. Initial work is seeking to provide a research base concerning the most effective ways for schools to interact with and assist parents of disadvantaged students and interact with the community to produce effective community involvement.

Abstract

This study uses data from a national survey of principals in public schools that include grade 7 to document and analyze the variation throughout the U. S. in the types of marks and evaluations included on report cards issued to young adolescents. The analyses examine the prevalence of report card entries of different types and the antecedents and consequences of using specific types of entries. Principals report that *performance* grades are ubiquitous, *handwritten comments* and *conduct* grades are common, and *progress* grades and *effort* grades are rare. Although grade span, region, size of grade enrollment, and urbanicity have some important connections to report card practices, there is considerable variation in practices within schools that have similar grade spans, locations, or grade enrollments. Use of progress grades or handwritten comments on report cards is significantly associated with middle grades principals' reports of lower retention rates, lower projected dropout rates for males, and more successful middle grades programs.

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Introduction

Schools that serve middle grades students display considerable diversity in their educational approaches and practices. These schools vary in grade span, size, grouping practices, curriculum, instructional methods, teacher training and certification, and a host of other areas (Epstein & Mac Iver, in press). They don't vary, however, in one respect -- almost all schools give their students report cards.

Why is the issuance of report cards a ubiquitous practice? One reason is that parents demand report cards because they want to know how their children are doing in school (Slavin, 1978). Also, teachers believe that report cards serve to motivate students and to assist students in identifying their strengths and weaknesses.

Although virtually all young adolescents receive report cards, these report cards vary in the areas eval-

uated and in standards used for evaluation. This paper describes and analyzes the variation throughout the nation in the types of marks and evaluations included on report cards in public schools that include grade seven.

Examples of questions considered are: Do all schools give students letter or number grades on their report cards to indicate their academic performance in each subject? How often are separate grades given for progress, effort, or conduct? How often are written comments or computer-generated comments included on report cards? How do schools with different grade spans, in different locations, with different types of student populations differ in the report card entries they use? Are a school's report card entries related to the outcomes obtained by the school and its students (e.g., the school's nonpromotion and dropout rates)?

Method

The schools in the study are a probability sample of public schools in the United States that have 7th-grade students. From the approximately 25,000 public schools that serve regular 7th-grade students, 2,000 schools were sampled with probabilities proportional to each school's enrollment per grade level as reported by Quality Education Data, Inc. in 1988. In addition, two subuniverses of schools were over-sampled: schools that serve both elementary and middle grades in metropolitan areas and schools in districts that have substantial rates of poverty (i.e., Orshansky index at or above 25). Approximately 200 of each type were added to the sample, bringing the total sample size to 2,400.

In the spring of 1988, the Johns Hopkins Center for Research on Elementary and Middle Schools (CREMS) sent survey forms by mail to the principals of the 2,400 schools in the sample. A total of 1,753 (73%) of the principals provided information on their school for this study, including 1,344 who returned surveys by mail and 409 who completed shorter telephone interviews. Weighting the telephone interview responses to account for the similar non-responding schools that were not followed up by telephone brings the weighted response rate to 93% for the items that were common to the mail and telephone surveys.

For data analysis purposes, each school was first assigned a "weight" that was the inverse of its probability of selection. This weighting returns the sample to an equal probability (representative) sample of schools.¹

The measures used in the analyses reported here have been described in detail elsewhere (Epstein & Mac Iver, in press; Mac Iver & Epstein, 1990b). The measures include indicators of: a) the kinds of information given to students on their report cards; b) characteristics of the school; c) characteristics of the school's students; d) responsive middle grades practices implemented at the school; and e) outcomes obtained by the school and its students.

¹Three cases had weights greater than 19; their weights were 48, 58, and 73. These cases represent schools having five or fewer students per grade level. The atypically large weights assigned to these schools reflect the low probability of selection for schools containing only 1 to 5 seventh-graders. Because we deemed it unreasonable to have any school "stand-in" for 48 or more of its peer schools in the analyses, these three cases were each assigned a revised weight of 19. Thus, in our analyses, schools that have an extraordinarily small enrollment per grade level are under-represented.

Prevalence of Report Card Entries of Different Types

Just about all schools -- 99% -- give middle-grade students letter or number grades for academic performance in each subject to provide feedback on students' levels of attainment.

In addition to this informational function, one purpose of performance grades is to motivate all students to give their best efforts. However, performance grades are likely to motivate students only if they believe that they have a realistic chance to earn a desirable one. Students who begin the year far behind grade level in achievement may find it impossible to obtain a desirable performance grade (or even a passing performance grade) even if they work hard. Unfortunately, performance grades often do not adequately recognize the progress that disadvantaged students make, because even dramatic progress may still leave these students near the bottom of the class in comparative performance or far from the "percent-correct" standard needed for a good grade.

Most teachers are aware of this problem with performance grades. When faced with a low achiever who has shown great progress but who is still near the bottom of the class, many will give the student a slightly higher performance grade than the one typically given to students performing at that achievement level. Still, most of these low achievers have no realistic shot at earning an "A" or "B" in performance.

One solution to the "accessibility problem" of performance grades is to add *progress* grades to the report card; grades that provide students with official recognition for doing better than they have done in the past in specific subjects (Mac Iver, 1990). A report card that includes progress grades allows low achievers who are displaying consistent improvement to receive "A's" or "B's" in progress even if their performance level is low relative to other students. As a result, progress grades may encourage students to work harder and to maintain or enhance their self-efficacy as learners, even if they cannot be the best students in the class. But progress grades are rare; only 19% of the schools that contain seventh-graders use progress grades on student report cards.

Effort grades may also be a way to provide students with recognition for making the most of their opportunities to learn, regardless of their relative rank in class or current level of achievement. About one quarter (27%) of the schools give separate effort grades for each subject. But effort grades may not

be effective in motivating low-achieving students for two reasons. First, it is difficult for teachers to assess student effort apart from student performance, so effort grades often do not differ much from performance grades. Second, the message delivered by giving a low achiever a high effort grade may be ineffective. For example, a low-achieving student who receives a high effort grade but a low performance grade may conclude that trying hard doesn't really help and that he or she will always be a "dummy" in that subject.

About half of the schools give grades for *conduct*. It is questionable whether conduct grades have any positive effects on student motivation or attachment to school. A high conduct grade is nothing to be proud of; it simply indicates that the student is conforming to classroom and school rules and is not a "discipline problem." All students are expected to behave in this way. On the other hand, a mediocre conduct grade may be viewed by young adolescents as a controlling, punitive measure designed to increase their level of conformity. They may feel that it is unfair for the teacher to "grade them down" for their conduct as long as they are learning and allowing others to learn.

Handwritten comments in each subject are given on report cards in about half of the schools that contain grade seven. Positive comments may motivate students to work harder by letting them know that teachers are paying attention to them and recognizing their contributions to the class.

Computer-generated comments (used by about 30% of the schools) are intended to accomplish the same objectives as handwritten comments. But, because they seem less personal, they may not be as effective as handwritten comments in motivating students.

Although the focus of this paper is on how alternative report card entries may affect students' motivation and their likelihood of being retained to repeat a grade or of dropping out of school prior to high school graduation, report cards serve other functions in addition to their motivational function. As noted, report card entries are one of the few ways in which schools communicate with parents. This may explain why certain types of grades are frequently given even though their motivational value is questionable. For example, the primary purpose of conduct grades may be to keep parents informed concerning their child's deportment in school.

Antecedents of Report Card Entries

Linear probability analyses using Goldberger's (1964) weighted least squares approach were performed to identify significant antecedents of using report card entries of different types. The antecedents considered were grade organization, region, 7th-grade enrollment, urbanicity, and type of student population.

Grade Organization. The relationship between a school's grade span and the type of report card entries it uses has been considered elsewhere (Epstein 1990, Epstein & Mac Iver, in press). This earlier work indicated that middle schools and grade 7-8 schools give the greatest number of different types of report card entries and middle-high combination schools give the fewest. K-12 schools are notable for their higher than average use of progress grades. K-8 schools, middle schools, and 7-8 schools are notable for their higher than average use of effort grades. Junior high schools are notable for their high use of computer-generated comments.

The coefficients in the first five rows of Table 1 indicate that grade span continues to be a significant predictor of report card entries even after controlling for the effects of region, 7th-grade enrollment, urbanicity, and type of student population. For example, the fourth row of Table 1 indicates that, compared to middle schools, junior high schools are 7% less likely to use progress grades, 15% less likely to use effort grades, and 13% less likely to use conduct grades. On the other hand, junior high schools are 15% (more) likely than middle schools to provide computer-generated comments on their report cards. Overall, the grade span effects observed in Table 1 are quite similar to those found in earlier-reported bivariate analyses (e.g., Epstein & Mac Iver, in press).

Insert Table 1 about here.

Region. Overall, alternative report card entries such as progress grades and effort grades are used more frequently in the Northeast than in other regions. In the Midwest, alternative report card entries are relatively uncommon; midwestern schools often give performance grades only. Specifically, the results in Table 1 indicate that the Northeast uses a) progress grades significantly more often than does the Midwest or West, b) effort grades significantly more often than any of the other regions, and c) conduct grades and written comments significantly more often than the Midwest.

The low use of alternative report card entries in the Midwest is consistent with a general conservatism found in the Midwest concerning middle grades practices. Although many of the schools that pioneered the middle school movement are located in the Midwest, the region as a whole lags behind other regions in the adoption of certain key practices. For example, schools in the Midwest are less likely than other schools to use interdisciplinary teacher teams or to establish group advisory periods (Mac Iver & Epstein, 1990b).

Seventh-grade level enrollment. The number of seventh-graders present at a school is associated with grading practices at the school regardless of the school's grade organization, region, urbanicity, or type of student population. Schools that have a large number of students per grade level are significantly less likely to use progress grades or handwritten comments.

These findings may be explained in part by the relative difficulty in monitoring the progress of a large number of students at each grade level and the time-consuming nature of handwritten comments. Schools that have large seventh-grade enrollments rely relatively more on less personal but less time consuming computer-generated comments.

Urbanicity. Urbanicity is significantly associated with the likelihood that a school will use comments of different types on report cards, even after controlling for the other predictors listed in Table 1. For example, schools in rural areas are more likely to provide students with handwritten comments on their report cards than are schools in urban or suburban areas. This is true regardless of school size.

Why do schools in rural areas provide handwritten remarks on report cards more often than do equally small schools located in urban or suburban areas? It may be that parents in rural areas expect more personalized communication from teachers than do parents in other settings and that schools' practices reflect these expectations. For example, a teacher working in an urban middle grades school, even if the school is a small neighborhood school, often lives in a different part of the city entirely and may have few naturally-occurring contacts with his or her students' parents outside of school settings. This probably lessens parents' expectations of receiving a personal note from the teacher along with the report card.

Urban schools use computer-generated comments less often than might be expected based on their size, grade organization, and type of student popu-

lation. Suburban schools display relatively high use of such comments. In many suburban districts, the availability of personal computers and software makes it possible for schools to design and produce personalized report cards for their students. But, the severe financial constraints faced by many urban districts may make it less likely that individual schools will have the computing resources they need to generate their own "in-house" report cards with personalized comments.

Type of Student Population. Schools were classified as disadvantaged, regular, or advantaged based on their student populations (see Mac Iver and Epstein, 1990a for details). The type of student population served by a school is generally not a significant predictor of the school's report card entries.

Consequences of Report Card Entries

There are several reasons to expect that in schools that use responsive grading practices (e.g., where progress grades or written comments are included on the report card along with performance grades) retention rates and dropout rates will be lower.

As argued earlier, responsive grading practices are likely to have a positive effect on student motivation and achievement, especially for those low-ability students who are at highest risk of being retained or dropping out before they finish high school. If low-ability students work harder and reach higher levels of achievement in schools that use responsive grading, then responsive grading should lead to lower retention rates. If low-ability young adolescents feel more successful and attached to school when responsive grading practices are used, then fewer of them are likely to adopt "failure-prone" or "alienated" behavior patterns that eventually lead to dropping out (Carnegie Task Force, 1990; Eccles & Wigfield, 1985).

Also, the inclusion of progress grades and written comments on a report card forces teachers to pay more attention to each student's improvement and areas of strength. By making the positive accomplishments of low-ability students more salient to teachers, these grading practices may lead teachers to recommend more of these students for promotion to the next grade and may also lead to higher teacher expectations for students and to better teacher-student relations.

The goal of the multiple regression analyses in this section was to examine the "effects" of five different types of responsive report card entries on four indicators of positive outcomes for students and schools. These analyses address the hypothesis

Little variation in report card entries is explained by the regression models in Table 1. The small R's in Table 1 indicate that there is tremendous variation in practices within schools sharing the same grade span, region, urbanicity, school size, and type of student population. In present practice, alternative report card practices are used in some schools of all grade spans and sizes in all parts of the country. If it chooses to, almost any school can start including progress grades, effort grades, conduct grades, or comments on report cards. Thus, although grade organization and the other factors have some connections to report card practices, these factors do not limit the report card entries a school may choose.

that some forms of responsive grading may be less effective than others -- for example, that conduct grades, computer-generated comments, and effort grades might be less effective than progress grades and handwritten comments in promoting positive outcomes.

Outcome Measures. The survey data contain no information on the achievement or motivation of individual students. But, the data do contain (1) principal reports of actual retention rates at each grade level in the middle grades (Mac Iver & Epstein, 1990b, Appendix, Variable XIX), (2) estimates of the percent of present seventh-grade boys who will not graduate from high school (based on past records, and principals' past experience or best guesses; Variable XVIII-a), (3) estimates of the percent of present seventh-grade girls who will not graduate from high school (Variable XVIII-b), and (4) principals' perceptions of the strength of the school's overall middle grades program (the rating scale ranges from "Excellent -- present practices fit student needs exactly" to "Weak -- need to design new practices and major revisions"; Variable XV).

Although these measures are imperfect indicators of the outcomes that students and schools are experiencing, earlier analyses have demonstrated that they have sufficient validity to be useful and informative (e.g., Mac Iver & Epstein, 1990b).

Current Average Retention Rate Across the Middle Grades. The analyses estimate the effects of report card entries on a school's average middle-grade retention rate after controlling for other factors that also influence retention rate. Five multiple regression models were estimated, one for each different type of report card entry considered here.

The effects of report card entries were evaluated after controlling for the effects of *characteristics of the school* [grade organization, location (region and urbanicity), number of seventh-graders enrolled, average proportion of students who attend each day], *characteristics of the school's students* (proportion of black students, proportion of Hispanic students, proportion of students whose parents are professional or managerial personnel, average academic ability of students upon entry to the school, proportion of students in district who live below the poverty line), and *middle grade practices* (use of interdisciplinary teaming and use of supportive group advisory activities). Thus, the effects of report card entries described here are those effects that are independent of, or in addition to, the effects of these other factors that influence the proportion of students retained.

The first column in Table 2 summarizes the effects of report card entries on retention in the middle grades. As anticipated, the use of progress grades and the use of written comments are both associated with lower retention rates. The other types of report card entries were not significant predictors of a school's average retention rate across the middle grades.

Insert Table 2 about here.

The coefficients listed in Table 2 are metric regression coefficients expressed as a proportion of the dependent variable's standard deviation. Thus, the $-.23$ coefficient for written comments indicates that schools that provide students with handwritten comments on their report cards generally retain about $1/4$ of a standard deviation fewer students than otherwise similar schools who don't use written comments. The $-.16$ coefficient for progress grades indicates that, even after controlling for the other factors included in the regression model, about $1/6$ of a standard deviation fewer students are retained in schools that use progress grades than in schools that don't use them.

These reductions in retention rates are large enough to be educationally significant. Based on the metric regression coefficients one would predict that -- in a middle school of 650 students -- ten more students will earn promotion each year if the school uses both written comments and progress grades on report cards than if the school doesn't use them.

As suggested earlier, one explanation for the lowered retention rates in schools using written comments and progress grades involves the positive impacts of these types of report card entries on student motivation. But this "student motivation" explanation may only be a partial one. Part of the as-

sociation between use of responsive report card entries and average retention rates may be spurious. For example, teachers who are aware of arguments in favor of responsive grading practices may also be more likely than average to be aware of research documenting the detrimental effects of retaining students. Schools that have higher concentrations of these "aware" teachers will have both lower retention rates and more responsive grading practices, regardless of student motivation levels in these schools. Yet, the fact that the effects of responsive grading are significant even after controlling for use of interdisciplinary teaming and group advisory activities -- practices that "aware" teaching staffs would be more likely to implement -- suggests that something more than "teacher awareness of recommended practices" is operating here.

Estimated Dropout Rates. The second and third columns of Table 2 report the effects of report card entries on a school's dropout rates (as estimated by the principal). When a student is retained, it increases the likelihood that the student will eventually decide to drop out (Shepard & Smith, 1989). Thus, schools that have higher retention rates also have significantly higher dropout rates. Therefore, in the regression models used to estimate the effects of report card entries on estimated dropout rates, a school's retention rate was included as an additional control variable.

Schools that use progress grades or written comments on their report cards have significantly lower estimated dropout rates for boys than would be predicted based on other factors (e.g., other school characteristics, characteristics of the school's student population, and the school's use of other supportive middle grades practices). Specifically, based on principals' estimates, more than $1/4$ of a standard deviation fewer boys are predicted to be future dropouts in schools that use progress grades than in similar schools that don't use progress grades. Similarly, more than $1/6$ of a standard deviation fewer boys are projected to be dropouts in schools that recognize student accomplishments through written comments on the report card.

To summarize these effects concretely, in a middle school that has 325 boys enrolled, the combined use of progress grades and written comments is associated with 12 fewer of these students dropping out before they finish high school.

Progress grades and written comments are not significantly related to girls' dropout rates. Progress grades and written comments may benefit boys more than girls because boys tend to receive lower performance grades than girls during early adolescence (Different Strokes for Different Folks, 1990). Further, good grades (in performance or progress) may be a more important source of self-esteem for

males than females; recent self-evaluation research in adolescence indicates that grades have a larger impact on male self-esteem than female self-esteem (Different Strokes for Different Folks, 1990).

The analyses suggest that the use of conduct grades may have a counterproductive impact on girls, raising principals' estimates of the likelihood that they will drop out. This finding is consistent with data on sex differences in adolescence (e.g., Rosenberg and Simmons, 1975), which suggests that girls are more vulnerable to criticism of their social behavior and more concerned about interpersonal success and interpersonal harmony than are boys. Although girls may receive good grades in conduct more often than boys, these good conduct grades may have little beneficial impact because students (especially girls) are expected to conduct themselves appropriately in school. When girls receive poor conduct grades, on the other hand, this may have a negative impact on their self-esteem and attachment to school. It is possible that conduct

grades serve little purpose except for helping "teachers explain poor performance and establish standards for better behavior and study habits in the next grading period" (Epstein & Mac Iver, 1990, p. 27). But, before definitely concluding that conduct grades are useless or harmful, research on the effects of conduct grades (on individual-level measures of students' achievement, motivation, and attachment to school) is needed. Such research is just beginning.

Perceived Strength of Overall Middle Grades Program. In schools that use progress grades or written comments on student report cards, principals are more likely to say that their present practices match their ideal of a successful program for students in the middle grades. This implies that the use of progress grades and written comments may produce measurable benefits that principals notice and that influence their satisfaction with their school's overall program in the middle grades.

Implications

Middle grades educators believe that motivating young adolescents to perform up to their potential is one of the most important problems that they face (e.g., Veenman, 1984). It is during the middle grades that many at-risk students enter a motivational tailspin that increases their odds of being retained and eventually leads many to drop out of school altogether (Carnegie Task Force, 1990). The findings presented here are consistent with the claim that the creation of more responsive report cards may be part of the solution to these problems. Specifically, handwritten comments and progress grades are significantly associated with principals' reports of lower retention rates, lower projected dropout rates for males, and more successful programs for students in the middle grades.

Schools that have a large number of students at each grade level were less likely to provide handwritten comments or progress grades to their students. In order to implement responsive grading practices, large schools may need to make organizational changes that help teachers to get to know each of their students better. By creating "small schools-within-the-school," interdisciplinary teams of teachers that share the same group of students, semi-departmentalized staffing patterns, or teacher advisory groups, a school may be able to increase the closeness of teacher-student relations (Epstein & Mac Iver, in press; Mac Iver, 1990, McPartland, 1990) and thus the feasibility of report card comments and progress grading.

For example, a follow-up analysis with these data indicates that schools that have interdisciplinary teams of teachers with common planning periods, supportive group advisory periods, and smaller schools-within-the-school have a 26% higher probability of using progress grading than do other schools with the same grade enrollment, type of student population, grade organization, region, and urbanicity.

Given that potentially beneficial effects of handwritten comments and progress grades are found consistently for each outcome measure considered here and that these effects remain undiminished even after controlling for a large number of possible confounding variables, it is not likely that the observed associations are spurious.

The analyses may even understate the potential benefits associated with these two types of report card entries because they indicate only the "average benefits." In many schools, teachers are encouraged but not required to write comments. Our measure of the "use of handwritten comments" did not distinguish between these schools and other schools where every teacher is required to comment on the progress and accomplishments of every student under his or her tutelage. The actual benefits to a school's students when they receive comments on each report card from each of their teachers are probably greater than the average benefits reported here.

Similarly, schools that not only give progress grades but also emphasize their importance (e.g., by having a "Rising Star" Honor Roll based on progress grades in addition to the regular Honor Roll based on performance grades) may obtain higher than average benefits from their use.

About one-third of our nations' children are educationally disadvantaged (Pallas, Natriello, & McDill, 1989). Responsive grading practices may disproportionately benefit disadvantaged young adoles-

cent students because these students enter the middle grades with performance levels that are significantly below those of more advantaged students. Because projections indicate that there will be a substantial increase in the number and proportion of disadvantaged youth in the U.S. in the next few decades (Pallas, Natriello, & McDill, 1989), increasing numbers of schools may want to consider assigning progress grades or written comments in addition to performance grades.

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Table 1

**Summary of Linear Probability Analyses Exploring the Antecedents
of Using Progress Grades, Effort Grades, Conduct Grades, and Comments
on Student Report Cards**

Effect	Use of Progress Grades	Use of Effort Grades	Use of Conduct Grades	Use of Written Comments	Use of Computer- Generated Comments
Grade Organization:					
1) K-8 vs. Middle School	-.04	.04	-.07	.06	-.17***
2) K-12 vs. Middle School	.10*	-.13**	.00	.01	-.05
3) Middle-High vs. Middle School	-.11**	-.15***	-.20***	-.09	-.04
4) Junior High vs. Middle School	-.07*	-.15***	-.13**	-.09	.15**
5) 7th-8th vs. Middle School	.02	-.02	-.01	-.04	-.02
Region:					
6) West vs. Northeast	-.08*	-.31***	.05	.01	.08
7) Midwest vs. Northeast	-.13***	-.30***	-.11***	-.08*	.04
8) South vs. Northeast	-.04	-.33***	.08	-.03	.04
Size:					
9) 7th-Grade Enrollment (in 100s)	-.02*	.01	.03	-.06***	.07***
Urbanicity:					
10) Urban vs. Rural	.00	-.04	.06	-.16***	-.06**
11) Suburban vs. Rural	-.05	-.04	.06	-.11***	.06
Type of Student Population:					
12) Advantaged vs. Disadvantaged	.04	.06	-.08	.07	-.03
13) Regular vs. Disadvantaged	-.02	.03	-.04	.00	-.07*
Adj. R²	<u>.06</u>	<u>.10</u>	<u>.07</u>	<u>.07</u>	<u>.05</u>

Note: Cell entries are weighted least squares regression coefficients; * $p < .05$ ** $p < .01$ *** $p < .001$.

Table 2

**Estimated Effects of Different Types of Report Card Entries
on Retention Rates, Predicted Dropout Rates, and Principal's
Ratings of School's Overall Middle Grades Program**

Effect	Current Average Retention Rate	Predicted Future Dropout Rate For Boys	Predicted Future Dropout Rate For Girls	Perceived Strength Of Overall Middle-Grades Program
Progress Grades	-.16*	-.26***	-.09	.22**
Effort Grades	.02	.04	.08	.09
Conduct Grades	-.06	.01	.14**	.01
Written Comments	-.23***	-.17*	-.07	.14*
Computer-Generated Comments	-.06	-.10	-.05	-.04

Note: Effects of report card entries were estimated in multiple regression models that control for the effects of average academic ability of students upon entry to the school, proportion of black students, proportion of hispanic students, proportion of students whose parents are professional or managerial personnel, proportion of students in district living below the poverty line, region, urbanicity, grade organization, seventh-grade enrollment, use of interdisciplinary teaming, and use of supportive group advisory activities. The regression models of current average retention rate also control for the effects of average daily attendance; models of predicted dropout rates and perceived strength of program also control for the effects of retention rate. Cell entries are metric regression coefficients expressed as a proportion of the dependent variable's standard deviation.

* $p < .05$ ** $p < .01$ *** $p < .001$